

METHOD AND APPARATUS FOR FABRICATING  
A SEMICONDUCTOR DEVICE

ABSTRACT OF THE DISCLOSURE

5           The present invention relates to a method and apparatus for depositing a metal  
layer inducing crystallization of an amorphous silicon layer in order to fabricate a  
semiconductor device including a crystalline active layer. Since the metal layer  
inducing a low temperature crystallization of silicon is deposited while heating the  
substrate, the metal layer contacting the amorphous silicon forms a metal silicide  
10 during the deposition process and the other portions of the metal layer remain in the  
state of metal. Thus, the non-silicide portion of the metal layer may be selectively  
removed after deposition and the silicide portion of the metal layer has a high  
resistance against oxidation.